SENATE BILL No. 689

Introduced by Senator Ortiz

February 21, 2003

An act to add Article 4 (commencing with Section 104210) to Chapter 2 of Part 1 of Division 103 of the Health and Safety Code, relating to cancer.

LEGISLATIVE COUNSEL'S DIGEST

SB 689, as introduced, Ortiz. Breast Milk Biomonitoring Pilot Program.

Existing law provides for various cancer screening and detection programs that are administered by the State Department of Health Services, including the Breast and Cervical Cancer Treatment Program.

This bill would establish the Breast Milk Biomonitoring Pilot Program, to be administered by the department. This bill would require the department, as part of its duties in regard to the pilot program, to develop an exemplary community-based biomonitoring pilot program using breast milk as a marker of community health in a minimum of 3 economically, racially, and geographically diverse communities throughout the state. This bill would also require the department to appoint an advisory committee of experts from the breast cancer, public health, environmental health, environmental justice, research, and scientific communities in implementing the pilot program.

This bill would require the department to adopt regulations implementing these provisions. This bill would require the department to submit a report to the Legislature concerning the pilot program annually each year for a period of 3 years after it has adopted regulations implementing these provisions and the pilot program has been funded and administered.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

(a) The lifetime risk of breast cancer has increased dramatically in the last 60 years, rising from 1 in 22 in the 1940s to 1 in 8 today. Incidence rates continue to increase, making breast cancer the second leading cause of cancer-related deaths for women in California. More that 50 percent of breast cancer cases cannot be explained by known risk factors.

(b) More than 85,000 synthetic chemicals are registered for use in the United States, and another 2,000 are added each year. Of those chemicals, only 7 percent have been tested for their effects on human health. The evidence linking numerous synthetic chemicals to adverse outcomes in human growth and development requires investigation and analysis of the effects of these contaminants on the human body.

(c) Levels of synthetic chemicals, also referred to as an individual's chemical ''body burden,'' provide information that can protect the well-being of individuals and support their ability to make informed decisions about their health. The systematic collection and analysis of biospecimens from individuals also may have significant public health implications since individuals body-burden data can be used to extrapolate the levels of exposure to environmental toxins by a community as a whole. The process of measuring the amount of synthetic chemicals in the body by examining blood, urine, fat, or breast milk is known as biomonitoring.

(d) Breast-feeding is considered to be the optimal choice for the health of both infant and mother. Infants who are breast-fed have stronger immune systems and thus lower incidences of ear and throat infections and asthma throughout their childhood.

(e) Breast-feeding has also been shown to promote better motor and concentration skills. In addition, adults who were breast-fed as infants appear less likely to suffer from obesity, diabetes, and other chronic health conditions.

(f) Breast-feeding is also advantageous for women, reducing the risk of various diseases and infections, including, but not limited to, breast and ovarian cancers. Approximately 64 percent of women in the United States breast-feed, at least initially after giving birth, and health professionals and other advocates would like to see an increase in breast-feeding because of the extensive health benefits.

(g) Science has shown the reliability of breast milk as a marker of human exposures to toxic chemicals. Research has detected more than 200 synthetic and toxic chemicals, including flame retardants, dioxins, polychlorinated biphenyls (PCBs), DDT, and other pesticides, in breast milk. Relatively little research has been conducted in the United States to determine levels of contaminants in humans at this time. Germany and Sweden have national breast milk monitoring programs, and this research has broad public health implications throughout the world.

(h) Breast milk biomonitoring is a key research tool in the struggle against breast cancer because contaminants are stored in the fatty tissue of human bodies. The international research community has joined breast cancer advocates in the identification of biomonitoring of chemicals as a research priority for breast cancer research.

(i) During lactation, fatty tissue is utilized to produce breast milk. Toxic chemicals may become more concentrated in the breast during lactation, and may be transferred to the nursing infant. Medical experts, including those at the American College of Nurse-Midwives and the American Academy of Pediatrics, advocate that breast milk remains the healthiest source of nutrition for infants, even with toxic contaminants.

(j) While the presence of synthetic chemicals in breast milk is distressing, the presence of these toxic chemicals in breast milk also has implications beyond the health of the mother and child as evidence of contamination of the communities in which they live.

(k) Many disenfranchised communities remain at higher risk for involuntary exposure to toxic chemicals because of factors, including, but not limited to, their proximity to hazardous waste incinerators, landfills, powerplants, and superfund sites. People who live in these communities could benefit from a better understanding of their chemical body burdens.

(*l*) The importance of forging a public-private partnership to ensure the creation of a model breast milk biomonitoring program that meets the needs of diverse communities has been well-documented. Specifically, African-American women's rates of mortality from breast cancer have been shown to be significantly higher than those of Caucasian women. Latinas also experience similar trends in increased mortality due to breast cancer. In fact, breast cancer is the leading cause of cancer deaths among Latinas.

(m) Therefore, the Legislature declares that the development of a statewide breast milk biomonitoring program will expand the possibilities for biomedical, epidemiological, and behavioral research. Since the United States has conducted only a few regional studies, there is a need for the State of California to encourage this research because it is vital to the health and well-being of millions of citizens, not only in developing prevention measures for breast cancer but also for other diseases related to environmental exposures.

SEC. 2. Article 4 (commencing with Section 104210) is added to Chapter 2 of Part 1 of Division 103 of the Health and Safety Code, to read:

Article 4. Breast Milk Biomonitoring Pilot Program

104210. (a) The department shall develop an exemplary community-based biomonitoring pilot program using breast milk as a marker of community health. The pilot program shall promote breast-feeding, identify the chemicals that are present in breast milk, establish links to specific environmental toxins and geographic areas, and initiate a plan to eliminate these contaminants.

(b) The pilot program shall be tested as a model biomonitoring program in a minimum of three economically, racially, and geographically diverse communities throughout the state, and the department shall adapt the program as needed.

(c) The department shall appoint an advisory committee, composed of experts from the breast cancer, public health, environmental health, environmental justice, research, and scientific communities. The advisory committee shall advise the department on implementation and evaluation of the pilot

program, and, if needed, any revisions to the model training program, resource materials, and outreach materials based on information gleaned from the pilot program.

(d) An entity identified by the Legislature shall oversee the design of a community-based, participatory research project that involves members of the communities where the pilot program is being conducted in the design, implementation, and evaluation of the research and in the communication of the research findings to the community.

(e) The department shall develop a model training program for health care providers, health educators, and other program administrators that communicates the benefits of assessing chemical body burdens while promoting the importance of breast-feeding. This model training program shall be disseminated as necessary.

(f) Promotion of the full spectrum of activities that support breast-feeding, including, but not limited to, adequate maternity leave, mother and baby-friendly public spaces, and workplace spaces shall be required in the test communities.

(g) The program established by this article shall include all of the following:

(1) Comprehensive educational and resource materials for program participants that communicate the dual benefits of understanding community health by measuring chemical body burdens while promoting breast milk as the healthiest, most nutritious food for infants.

(2) The development of a model protocol for any future programs that addresses the science and practice of conducting biomonitoring using breast milk and that engages the community and promotes breast-feeding.

(3) Community outreach materials that address confidentiality concerns and communicate the benefits of measuring chemical body burdens while promoting breast-feeding. These materials shall be disseminated to organizational and individual participants, and shall include, but not be limited to, information that does each of the following:

(A) Explains individual body burden analysis of the chemicals being investigated.

(B) Explains routes and levels of exposure.

(C) Describes population-based health effects and toxicity.

(D) Describes steps individuals can take to reduce their exposure to environmental toxins.

(E) Outlines steps being taken by local, state, and federal governmental entities to regulate or eliminate dangerous exposures.

(h) The department shall adopt regulations to implement this section.

(i) The department shall submit a brief report to the Legislature after the regulations to implement this section have been adopted, and annually each year, for three years after the pilot program has been funded and administered. The annual report shall include a program description, methodology, and program outcomes, and shall assess the goals of the different criteria for the pilot program. The department shall consult with the advisory committee established pursuant to subdivision (c), and other appropriate scientific entities, as part of the reporting process.

(j) As used in this article, ‘‘chemical body burden’’ means the level of a synthetic chemical in an individual.

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